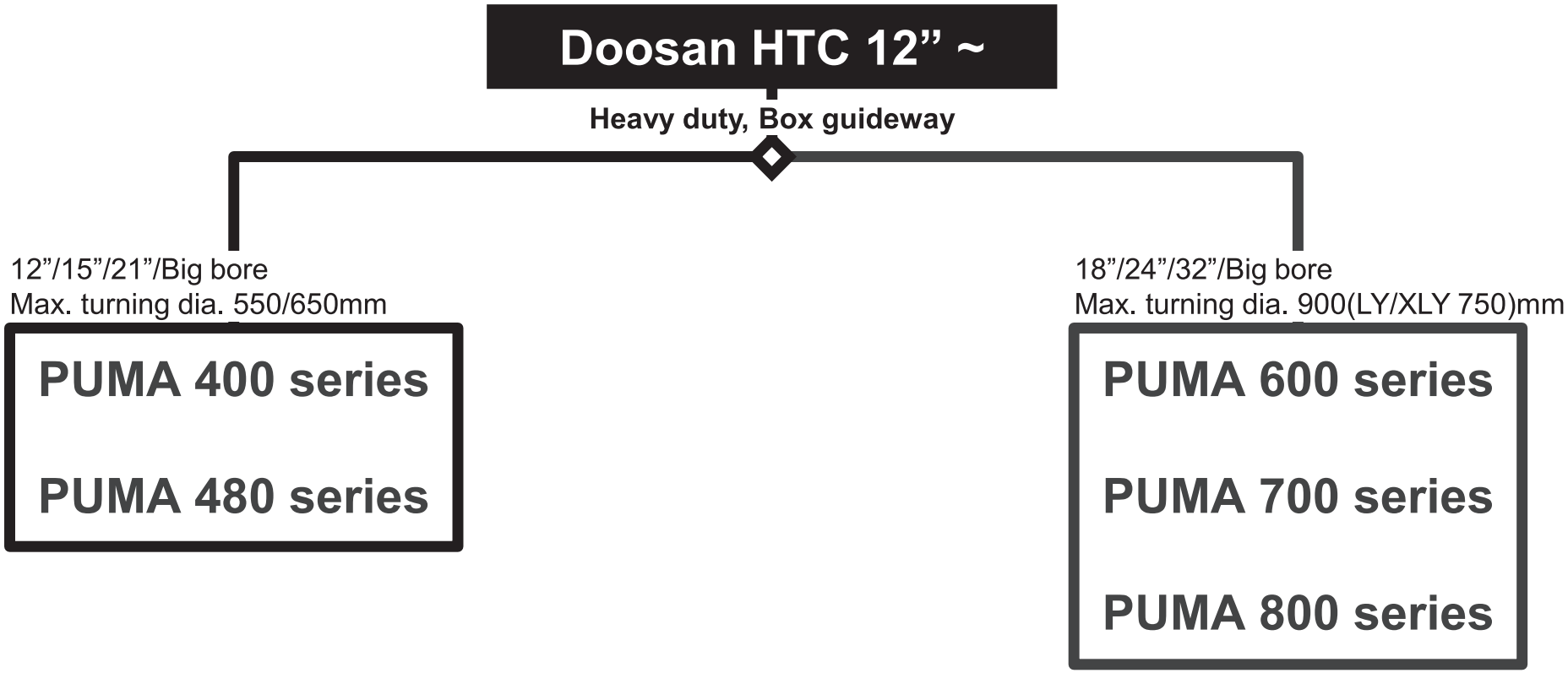
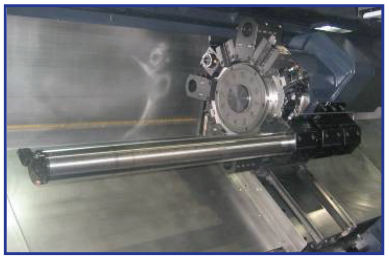
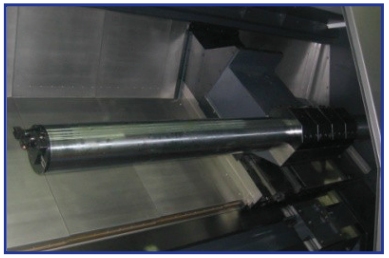
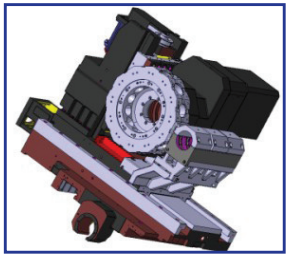
Medium and Large size HTC

**PUMA 400~800 series are suitable for heavy duty machining.
Especially, PUMA 400~800 series provide various applications for Oil & Gas Industry customers.**

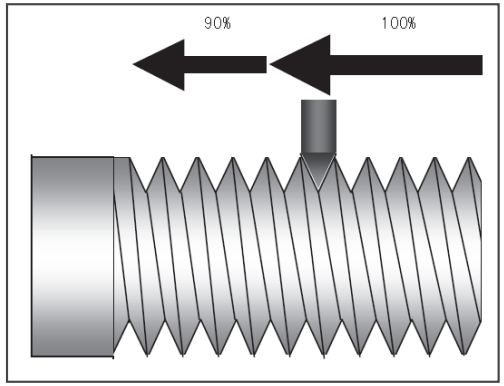


OIL & GAS _ LONG BORING BAR

TYPE	Reference Picture	Notice	Application Model
Bolted to Turret		• Tool holders can not be mounted on just next stations of long boring holder due to interference. • Limitation of max. tool weight. • Adjust the indexing time after assembly for smooth indexing.	• D100 • Puma 600M / LM / XLM • Puma 700M / LM / XLM • Puma 800M / LM / XLM
Bolted to Turret & Tool-post Body		• Tool holders can not be mounted on just next stations of long boring holder due to interference. • Disassemble the front part mounted on Turret to use other tools.	• D60 • Puma 400/M/L/LM/XL/XLM • D80 • Puma 400M/LM/XLM • Puma 480M/LM/XLM • D100 • Puma 400/M/L/LM/XL/XLM • Puma 480/M/L/LM/XL/XLM/D/LD • Puma 600(700,800)/L/XL • D120 • Puma 600(700,800)M/LM/XLM • D150 • Puma 600(700,800)/L/XL
Substitute for Tool post		• Long boring holder is used instead of tool post. • Standard tooling is not available	• D200 • Puma 600/M/L/LM • Puma 700/M/L/LM • Puma 800/M/L/LM
Bolted to Turret & Cross slide		• Tool holders can not be mounted on just next stations of long boring holder due to interference. • Disassemble the whole long boring assembly to use other tools.	• D120 • Puma 600LY/XLY • Puma 700LY/XLY • Puma 800LY/XLY

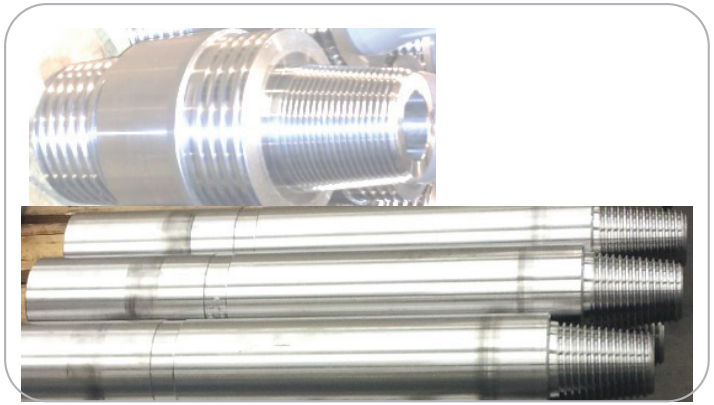
OIL & GAS _ THREAD FUNCTION

Arbitrary Speed Threading



0iTD	32i-A	32i-B	31i-A	31i-B
		✓		✓

also available function
to 2-axis Headstock with C-axis

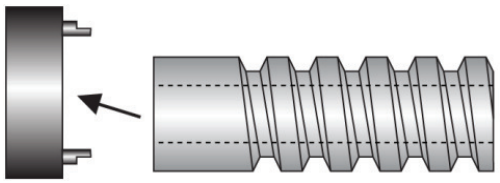


'Spindle speed override' when thread cutting

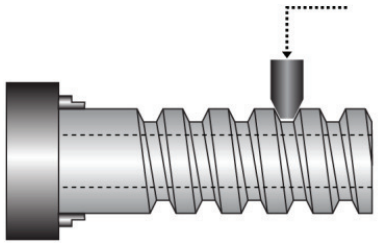
- Allowing the operator to adjust the spindle speed to avoid chatter
- CNC maintains feed axis synchronization to assure thread definition
- This function is useful restraining vibration & repeat machining that use various spindle speed

'Re-machining'

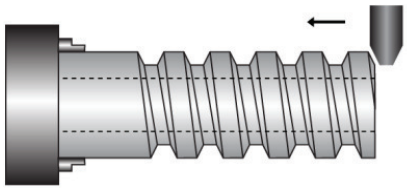
- Previously machined threads can be easily repaired



• Chucking the damaged part



• Manually positioning the tool into the machined thread with the spindle stopped
• Registering the position with the CNC the damaged part

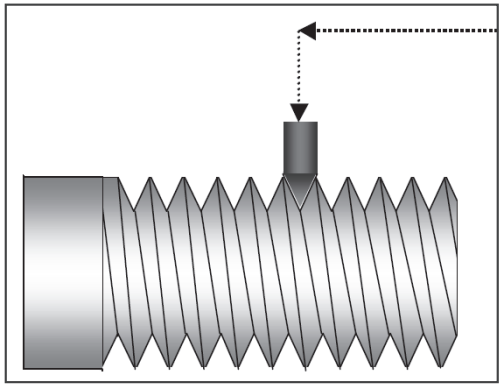


• Retract the tool, start the spindle and run the part program to re-machined the thread

OIL & GAS _ THREAD FUNCTION

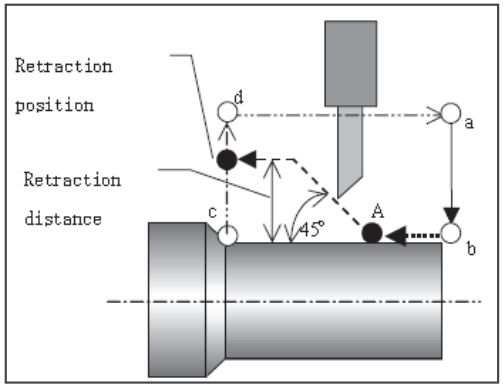
Efficient Thread Function

0iTD	32i-A	32i-B	31i-A	31i-B



- Thread repair function
  - –When the work-piece remove from chuck with any reason during thread cutting, this function allow that restart machining form same groove of thread before.
  - –After chucking measure the position of thread groove, then start machining by same program.
  - –MANUAL GUIDE i support the part of this function, advanced function is included “Arbitrary speed threading”
  - –This function need Cs contouring function

✓	✓	✓	✓	✓



- Tool retract and recover
  - –The tool can be retracted from a work-piece to replace the tool, if damaged during machining, or to check the status of machining. Then, the tool can be returned to restart machining efficiently.
  - –When the operator notice the crack of insert or any problem of machining, turn on the WITHDRAW switch on OP Panel . Then, the machining would be stopped & automatically move to tool changing position. After tool change, turn on the RECOVER switch that reactivate the program.

	✓	✓	✓	✓